## California Regional Water Quality Control Board Santa Ana Region

## Staff Report

April 20, 2007

ITEM:

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SUBJECT:

Appeal of Staff's Denial of an Exemption from the Minimum Lot Size Requirement for Subsurface Disposal System Use – Marwan Alabbasi, TPM 34098, Van Buren Boulevard and King Avenue, Woodcrest area, Riverside County – APN 273-141-001

## DISCUSSION:

On March 15, 2007, Marwan Alabbasi, owner of the above referenced property, submitted an application for the use of septic tank-subsurface disposal systems for the disposal of waste from a proposed commercial development at Van Buren Boulevard and King Avenue within the Woodcrest area of Riverside County. The commercial development includes a gasoline station with a convenience store and a car wash, 6 retail suites (4 retail shops, a coffee shop and a sandwich shop) and a fast food restaurant. The proposed car wash will include a closed loop system that will recycle and contain all wastewaters. There will be no wastewater discharges from the car wash into the septic systems. The lot size is approximately 5.39 acres. There is no sewer currently available to serve this lot.

The soils percolation report indicates that groundwater depth at the site ranges from 8.6 to 10.9 feet below existing ground surface. The Regional Board Guidelines for Sewage Disposal from Land Developments specify a depth of soil between ground surface and anticipated high groundwater in the disposal area of not less than 10 feet. Mr. Alabassi investigated the use of conventional septic tank subsurface disposal systems at his proposed development but was advised by Riverside County Environmental Health and Regional Board staff that it would be infeasible since the 10 foot separation between the ground surface disposal system and seasonally high groundwater could not be met.

The Regional Board has adopted minimum lot size criteria for septic tank-subsurface disposal system use that are contained in the Water Quality Control Plan (Basin Plan) for the Santa Ana Region. These criteria established a one-half acre minimum lot size requirement for new developments proposing the use of on-site septic tank-subsurface leaching/percolation systems. The Board found that it was necessary to limit the density of new subsurface disposal systems to control the nitrate quality problems found in the groundwaters of the Region. The minimum lot size requirements specify that the wastewater flow for each one-half acre of land may not exceed that from a three-bedroom two-bath house as specified in the Uniform Plumbing Code. This is equivalent

to 300 gallons per day (gpd) or 20 fixture units per one-half acre of land for commercial projects.

Based on the information provided in the applicant's March 15, 2007 submittal, Board staff determined that the total fixture unit count for the facility would not comply with the minimum lot size requirements.

Since neither the Board's guidelines for wastewater disposal nor the minimum lot size requirements could be met by the proposed project, staff denied the request to use conventional septic tank systems for wastewater disposal.

On March 28, 2007, Regional Board staff met with Riverside County staff, Mr. Alabbasi and two other project consultants to discuss concerns regarding the project. The concerns raised were the absence of the required minimum ten foot depth to groundwater separation and the expected high nitrate concentration of the wastewater discharges from the proposed developments. To address these concerns, Mr. Alabbasi proposed to grade the location of the disposal systems to provide the required 10 foot depth separation and also proposed an alternative treatment system. Mr. Alabbasi also indicated that once sewer is available to serve the development, he would be pleased to connect the development to the sewer.

Pursuant to the minimum lot size exemption criteria specified in the Basin Plan, project proponents may propose an alternative treatment system as the basis for an exemption from the minimum lot size requirements. Each such request must be reviewed on a case-by-case basis and submitted to the Regional Board for consideration.

Revised project plans were then submitted proposing the use of an alternative disposal system (Orenco AdvanTex with AX100 textile filters, denitirification tank and a recirculation/blend tank). Use of this alternative system is expected to result in effluent nitrate-N quality of 10 mg/L or less, which is consistent with the water quality objectives for and ambient conditions in the groundwater management zones to which the discharges from the development would be tributary.

Staff advised the project proponent that Regional Board consideration of the revised project was necessary in accordance with the minimum lot size exemption criterion pertaining to alternative treatment systems and since grading would be necessary to attain compliance with Riverside County Environmental Health requirements and the Board's Guidelines for Sewage Disposal from Land Developments that specify a minimum 10 foot groundwater separation.

## RECOMMENDATION:

Board staff recommends approval of the request for an exemption from the minimum lot size requirements subject to the following conditions:

(1) Mr. Alabassi shall enter into an agreement with a qualified engineer for the operation and maintenance of the alternative system. A copy of this agreement shall be submitted to the Regional Board; 2) Mr. Alabassi shall conduct quarterly sampling for one year to determine the nitrate (as N) concentration in the effluent and submit those analyses to the Regional Board office within 30 days after such sampling and analysis has occurred; 3) Mr. Alabassi shall operate the alternative treatment system so as to assure consistent compliance with 10 mg/L nitrate as nitrogen; 4) Mr. Alabassi shall obtain an annual permit from the Riverside County Health Department for the operation of the alternative system; and, 5) should Mr. Alabassi sell this property, he is required to disclose all of the conditions of approval stipulated in 1 through 4, above, to the new property owner(s). Mr. Alabassi shall also advise the Regional Board and Riverside County Environmental Health in writing<sup>1</sup> of new ownership and confirm that the disclosures identified above have been made. In the event that conditions 1-5 are not satisfied, Mr. Alabassi shall connect all domestic wastewater lines serving the facility to the sewer within six months of sewer availability.

Comments were solicited from the following agencies:

Riverside County Environmental Health – Sam Martinez/Chuck Strey Riverside County Building and Safety – Steve Dondalski Salem Engineering Group, Inc. – Bruce Myers RAMCAM Engineering Group, Inc. – Alex Irshaid

It should be noted that Riverside County requires the recordation of an alternative system with the property deed, providing additional assurance that disclosure to buyers is provided. Alternative systems are then permitted for the life of the system and the permit must be renewed annually by the property owner.